



SAGUARO NATIONAL PARK

CLIMATE FRIENDLY PARKS ACTION PLAN 2020

INTRODUCTION

As a participant in the National Park Service's (NPS) Climate Friendly Parks (CFP) program, Saguaro National Park (NP) belongs to a network of parks nationwide that are putting climate friendly behavior at the forefront of park operations and resource management. As part of this program, Saguaro NP has conducted a greenhouse gas (GHG) emission inventory, participated in a climate change and sustainability educational workshop, set climate change mitigation and GHG emission reduction goals, and integrated these actions into a park-wide Environmental Management System (EMS).



Elf Owls in a Saguaro Cavity
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The EMS takes a systematic approach to identifying and addressing environmental impacts at the park. The EMS provides a framework for tracking environmental protection and sustainability priorities and details the implementation of these actions. By integrating CFP-related actions into the park's EMS, Saguaro NP is taking an integrated approach to climate change response and sustainable management of park resources.

ENVIRONMENTAL POLICY & SUSTAINABILITY COMMITMENT STATEMENT

Saguaro NP is committed to protecting and preserving its natural, cultural, and archeological resources through environmental stewardship as mandated by the Organic Act and the park's enabling legislation. This commitment includes energy, water, solid waste, chemical use, and GHG emission reductions (collectively called sustainability) as required by federal Executive Orders and Department of the Interior and NPS policy.

Our staff, volunteers, and contractors will be expected to follow our environmental, pollution prevention, energy reduction, and related procedures and programs. Our goals and messaging surrounding sustainability and climate change will be clearly communicated throughout the park and to visitors through all available channels. Together we will examine and conduct operations and activities in a professionally sound manner, effectively and efficiently complying with the letter, spirit, and intent of applicable environmental regulations, standards, executive orders, and policies related to sustainability.

ACCOMPLISHMENTS

Prior to holding the CFP workshop, Saguaro NP had already started to embark on our sustainability journey by embedding sustainability actions in our EMS. As part of these efforts, Saguaro NP has taken a number of actions which have reduced our environmental impact.

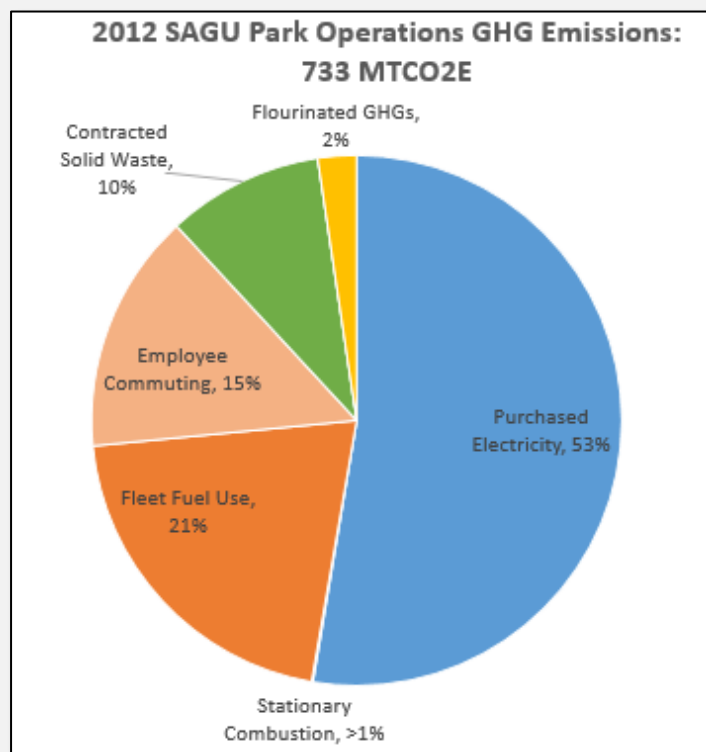
Sustainability Concern	Completed Actions
Energy and GHG Emissions	Track and report monthly building energy consumption, and encourage conservation through employee engagement, competition and information sharing. Developed best practices guidance for conserving energy in buildings. Replaced lights in Visitor Center with LEDs.
Transportation	Prepared a Clean Cities Grant to increase alternative transportation opportunities in the park. Developed a no-idling policy for the park.
Waste	Installed water bottle refilling stations at the park's visitor centers, as well as recycling containers and recycling messaging throughout the park. Developed an Integrated Solid Waste Alternatives Program plan.
Water	Utilize a rainwater harvesting system at the Manning Cabin site. Created pollinator gardens sustained entirely by rainwater and rainwater runoff, using swales and drainage structures.
Air Quality	Collaborate with Pima County to alert public and staff during times of standard ozone-level exceedances and mitigate impacts.

BASELINE GREENHOUSE GAS EMISSIONS PROFILE

Saguaro NP developed a GHG inventory using the Climate Leadership in Parks (CLIP) tool. For Saguaro NP, the majority (53 percent) of GHG emissions come from energy use—mostly purchased electricity. Fleet fuel use, employee commuting, and waste disposal are also notable sources of emissions. Comparing Saguaro NP's emission profile to the average CFP park, Saguaro NP emits fewer GHG emissions overall—733 metric tons of CO₂ equivalent (MTCO₂E) per year; however, Saguaro NP's emissions profile is notable in that purchased electricity dominates as an emission source.

GOALS & ACTIONS

As part of the CFP program, Saguaro NP has developed a number of goals. To help meet these goals, the park will develop annual actions and track them through the EMS. The priority actions for the first year are listed below. We will continue to chart our progress against the goals annually and refine our actions as part of the plan, do, check, act process.



	GHG Emissions	Climate Change Response	Education
Goal	Implement an ozone reduction & education program	Become a certified Urban Night Sky Place	Integrate climate change messaging into interpretation and education programs for the park's one million annual visitors
2020 Action Plan	<ul style="list-style-type: none"> - Develop social media and press releases - Promote carpooling & telework during ozone exceedance periods - Partner with researchers to examine harmful effects of ozone on park resources 	<ul style="list-style-type: none"> - Inventory lighting infrastructure within the park - Develop a lighting management plan - Apply to the International Dark Sky Association to gain certification as an Urban Night Sky Place 	<ul style="list-style-type: none"> - Conduct communication training for staff - Launch climate change webpage - Develop idling messaging/signage for visitors and employees

ROLES, RESPONSIBILITIES, & RESOURCES

The “Green Team” is an interdisciplinary group of park employees that regularly monitors and updates sustainability goals for the park. This team also works together to identify sustainability and climate change challenges, track progress toward achieving goals, and works with other staff to continually improve operations. Through their leadership, the park ensures that sustainability initiatives move forward and goals are accomplished.

EDUCATION & COMMUNICATION

By improving communication within Saguaro NP, we are developing an environment that provides guidance and clarity while instilling ownership and support in accomplishing goals and initiatives. Saguaro NP has improved communication amongst employees through all-employee meetings, leadership meetings, and park-wide training sessions. Staff and partners are encouraged to give feedback or comments, and they are invited to participate in the Green Team’s activities in any capacity they choose. Saguaro NP has increased its climate change messaging towards the public, both in-person and through the online community. Environmental education programs, interpretive events, social media posts, and the park websites teach on the complex themes of climate change and sustainability.



Rincon Peak
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CONCLUSION

The elements of our EMS form the foundation of the environmental protection, climate change response, and sustainability work that we will accomplish at Saguaro NP. We hope that visitors will check back in with us and see how we progress as our program continues to evolve!

CONTACTS

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Saguaro National Park

Climate Friendly Parks Action Plan (2020)

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Park Superintendent

Date

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Regional CFP Representative

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SHAWN NORTON

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National CFP Representative

Date